



## McArthur River Mining Sustainability Report 2005



## SCOPE OF THIS REPORT

This report details the Health, Safety, Environment and Community (HSEC) performance of McArthur River Mining (MRM) from 1 January 2005 to 31 December 2005.

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## General Manager's Message

Since mining began in 1995, MRM has been an active member of the Borrooloola and Northern Territory communities.

We understand our responsibility to ensure our activities are sustainable within the environment while providing jobs, social benefit and economic prosperity for the local communities in which we operate.

At MRM we are committed to our own Health, Safety, Environment and Community policy (HSEC) which is based on the highest standards of environmental management, health and safety performance and social partnerships in our business.

While this first Sustainability Report details our performance for 2005, it builds on an excellent record to date.

- After 13 years of annual independent testing, including 1992/1993 benchmarks, covering every possible point of impact, there is no evidence of adverse environmental impact by the mine in either the Gulf of Carpentaria or the McArthur River
- Since 1995, 206 jobs have been directly provided for local indigenous people
- MRM has been a catalyst for the development or upgrading of roads, road freight, air services and telecommunications infrastructure in and around Borrooloola.

A key announcement in 2005 was our intention to undertake a major development to convert our current underground mine to open pit operations to extend the life of mine for 25 years. As part of the statutory approval process for this development we have undertaken an Environmental Impact Statement (EIS) process which is continuing in 2006.

Other key sustainability highlights for 2005 include:

- Dramatic improvement in safety performance with a 61 percent reduction in the Lost Time Injury Frequency Rate
- Commendation award in the Community Relations category conferred by the Northern Territory Minerals Council's Resource Industry Awards of Excellence 2005
- Winning the Northern Territory Mines Rescue Competition, a key safety event for the Territory minerals industry
- Development and implementation of a Fatigue Management Procedure, a comprehensive review of our Injury Management System and the appointment of a dedicated Injury Management Coordinator
- Implementation of a \$1.9 million geopolymer injection project to guard against seepage from the Tailings Storage Facility
- Commitment of \$600,000 for the Borrooloola Swimming Pool – a joint initiative of the Australian Government, Northern Territory Government and local community to help improve health and fitness among the community's youth.

Our sustainability report is designed to share our progress with you and we would welcome any feedback. Please email your comments to [mrmprojenq@xstrata.com.au](mailto:mrmprojenq@xstrata.com.au) or write to me at McArthur River Mining, PO Box 36821, Winnellie, NT, 0821.

**Brian Hearne**  
*General Manager*  
*McArthur River Mining*



## Our approach to sustainable development

For Xstrata, sustainability is about caring for the environment in all stages of mining and metal production; efficient and responsible use of resources, including energy, water and land; keeping our employees safe and healthy; improving services and facilities in communities where our employees and their families live; helping these communities to build the capacity to sustain themselves as vibrant, self-reliant centres; and providing our shareholders with a highly profitable return on their investment in our business over the long term.

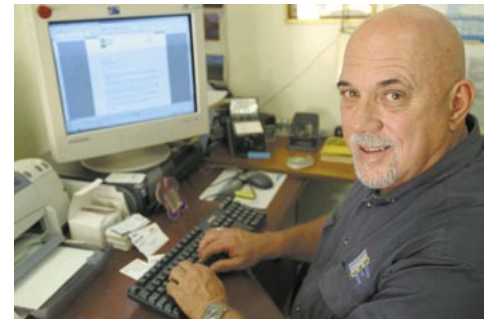
### **Enduring Value – A Framework for Sustainable Development**

Xstrata Zinc is a signatory to *Enduring Value – the Australian Mineral Industry Framework for Sustainable Development*. This framework was developed and launched by the Minerals Council of Australia (MCA) in October 2004 to give practical effect to the International Council on Mining and Metals' (ICMM) sustainable development principles.

The key role of *Enduring Value* is to translate the principles of sustainable development into practices that ensure industry operates in a way that meets community expectations and maximises the long-term benefits to society by effectively managing Australia's natural resources.

As a signatory to *Enduring Value*, Xstrata Zinc has obligations to include progressive implementation of the ICMM Principles and Elements, public reporting of site level performance at least annually and assessment of the systems used to manage key operational risks (using either internal or external assessment as appropriate).

Further details about *Enduring Value* are available at [www.minerals.org.au/enduringvalue](http://www.minerals.org.au/enduringvalue).



## Contributing to our economy

MRM operates a zinc mine located in the remote Borroloola region of the Northern Territory, about 900 kilometres south-east of Darwin, 100 kilometres inland from the Gulf of Carpentaria, and 60 kilometres from the town of Borroloola.

The ore body mined is one of the largest known deposits of zinc and lead in the world. In 2005, MRM generated:

- 1.8 million tonnes of ore
- 153,000 tonnes of zinc in concentrate
- 35,000 tonnes of lead in concentrate.

Historically, MRM has been an underground operation using both room and pillar, and bench stope mining methods.

The mine is a leading producer of a mixed zinc-lead sulphide (or bulk concentrate) and refined zinc products which are exported worldwide to refineries using the Imperial Smelter Process. A flotation process is used on site to produce the bulk concentrate which is, on average, comprised of 46 percent zinc.

The total workforce of approximately 350 has, with only a few exceptions, been a fly-in, and fly-out presence. Indigenous employees have accounted for around 10 percent of mine staff. Employment of local community members has generally been through the mine's traineeship program with some moving onto long term careers within the mining industry.

In August 2005, MRM announced its intention to convert the mine from underground to open pit operations to enable the mine to continue production. This would extend the life of mine by 25 years. After 10 years of operation, the most accessible underground ore has been extracted and the underground mining operations, which comprise over 100 kilometres of underground tunnels, have become uneconomical.

In the same month, work commenced on a test pit to provide ore for sampling, analysis and processing as underground operations were curtailed. By October 2005, the underground operations were significantly reduced.

Growing world demand for zinc, particularly in Asia, and improved refining methods, coupled with reduced operating costs and improved quality of MRM's bulk concentrate product have supported the decision to inject further investment in the mine.

The conversion will mean a surface pit covering 83 hectares will be constructed to access the ore, instead of accessing the orebody from MRM's extensive network of underground tunnels and rooms. It will also involve diverting a 5.5 kilometre section of the McArthur River and around 2.5 kilometres of Barney Creek around the open pit.

The open pit will be on the current mining leases and will largely use existing facilities to minimise disturbance to the environment.

MRM is the main economic generator and employer in the Borroloola region, providing jobs, business opportunities and economic prosperity for local people and the wider Northern Territory community.

Our economic contribution in 2005 consisted of:

- Employment for 340 people, including contractors
- An annual wages bill of \$17 million
- 10 trainee and apprenticeship places for unskilled local residents
- \$60 million spent on purchasing Territory goods and services including a contract with local indigenous business partnership, Carpentaria Shipping Service
- \$7 million paid to Governments in taxes and charges, including payroll and group tax
- \$17 million spent on electricity
- \$15,000 paid in annual rates to the local Borroloola Community Council
- \$50,000 in sponsorships and donations supporting a number of local education and environmental research projects, as well as community events and sporting groups.



# Caring for our people

The health and safety of our employees is critical to the business success of Xstrata Zinc. We believe that all work-related incidents, illnesses and injuries are preventable.

## HEALTH AND SAFETY

### Key challenges

The key health and safety challenges facing MRM are:

- Minimising exposure to occupational hygiene hazards such as noise, dust and lead
- Working in hot climatic conditions
- Management of contractors
- Management of risks associated with the change of mining method from underground to open pit.

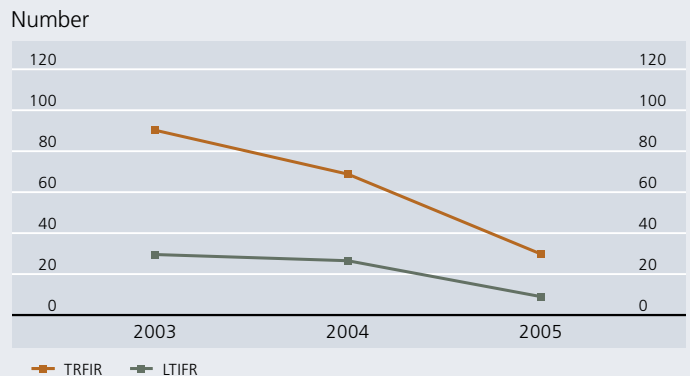
### 2005 results

Safety performance is tracked using three measures – Total Recordable Injury Frequency Rate (TRIFR), Lost Time Injury Frequency Rate (LTIFR) and Disabling Injury Severity Rate (DISR).

In 2005, MRM reported a 48 percent improvement in TRIFR and 61 percent improvement in LTIFR compared with the mine's 2004

performance (see Graph 1). No fatalities were recorded. While we did not achieve our DISR target, our performance improved marginally compared with 2004 (see Graph 2). Greater improvements on this measure are expected through programs now in place for effective injury management and continual workplace risk assessments.

**Graph 1. MRM Safety Performance 2003–2005 (TRIFR & LTIFR)**



## HEALTH AND SAFETY PERFORMANCE

2005 Targets	Performance
<b>Health and Safety</b>	
Zero fatalities	✓
LTIFR < 10	✓ (9.0)
TRIFR < 36	✓ (26.9)
DISR < 4,200	✗ (5,281.7)
<b>Training and Development</b>	
Maintain current skills base	→
Manage 150+ underground redundancies	✓
Recruit key personnel to manage open pit (15 people)	✓

2006 Targets
Zero fatalities
LTIFR < 4
TRIFR < 16
DISR < 4,700
Increase apprenticeships and trainees numbers by 50 percent
Complete site-wide benchmarking review

✓ Achieved    ✗ Not achieved    → Action continues into 2006

### Monitoring and safety programs

The substantial improvements in safety performance during 2005 are attributed to several initiatives which ensured employees are provided with the skills they need to work safely and productively. These included:

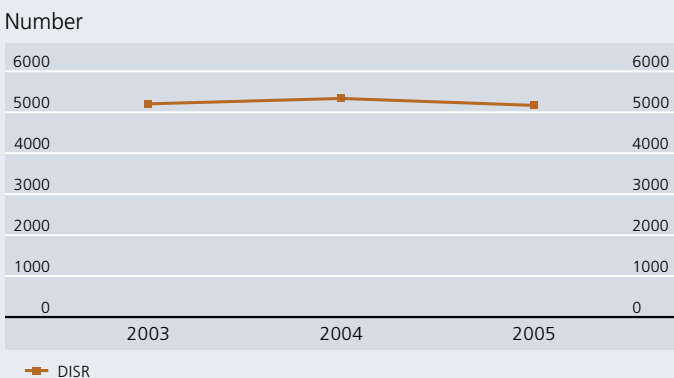
- Personal coaching with a specialist in behavioural change to encourage all employees to accept greater responsibility for personal and team safety
- Development and implementation of a Fatigue Management procedure
- A comprehensive review of MRM's Injury Management System and the appointment of an Injury Management Coordinator
- The appointment of a Safety, Health and Environment Officer for Hampton Transport Services which is contracted to transport bulk concentrate from the mine to the Bing Bong loading facility.

MRM also restructured its support departments to combine Health, Safety and Environment Sections into a single department to provide a consistent approach and improve coordination between these important operating areas.

In 2006 planned improvements to be made to MRM's Health and Safety Systems include:

- Developing and implementing a site-wide Permit to Work System, incorporating hot work, confined space, permit to dig and isolation
- Implementing a structured Hygiene and Health Monitoring Program which will include noise, dust and hydration
- Updating our Emergency Response Plans and introducing a duty card system
- Developing a comprehensive site-wide Training System
- Implementing a Workplace Safety Observation System
- Reviewing and updating our Injury Management System.

Graph 2. MRM Safety Performance 2003–2005 (DISR)



Loading bulk concentrate at the fully contained Bing Bong loading facility.



## Managing Lead

MRM utilises the National Standard for the Control of Inorganic Lead at Work (NOHSC:1012) and the National Code of Practice for the Control and Safe Use of Inorganic Lead at Work (NOHSC:2015) as a guide for the control of blood lead levels in all our employees.

In 2005 there were no instances of our people exceeding the national medical removal limit.

## TRAINING AND DEVELOPMENT

### Key challenges

The key human resources challenges facing MRM are:

- Attracting and retaining appropriately skilled staff to the region
- Providing more in-house training to retain our current employees
- Diversifying our skills base through cross-training employees across key facets of our operation.

### Employment

By the end of October 2005 employee numbers were reduced by 150 as our underground mining operations were scaled back. Around 5 percent of the underground staff were found jobs in other Xstrata mines in Australia, 15 percent were employed with the open pit contractor or transferred internally to become new open pit employees, while redundancy packages including full entitlements were provided for the remaining staff.

A contract workforce was brought in to develop the open cut test pit on site as long term employment commitments cannot be made until government approval is granted for the full open pit development.

## Training and career development

In a competitive job market, training and career development are recognised as critical strategies to retaining employees. Our aim is to ensure all employees are provided with the appropriate training and career pathways to build a future with MRM. A training needs analysis is developed for all employees and contractors to ensure they are provided with the specific training they require to both effectively perform their duties and support career development.

## Cross Cultural Awareness

Cross Cultural Awareness Training is mandatory for all new employees entering the MRM workforce. The program highlights the significance MRM places on indigenous culture and its policy that all aspects of Aboriginal culture are to be observed and respected.



Gurdanji Traditional Owner Billy Coolibah, a custodial elder of the country on which the mine is located.



## case study

### INDIGENOUS TRAINEESHIP PROGRAM

The mine's entry level employment program for unskilled employees is the Maintenance Service Team (MST). The role of the MST is to maintain the airport, buildings and supporting infrastructure within the camp and mine accommodation.

Under this program, a total of 10 positions were provided in 2005 for unskilled local residents with no employment experience. The objective is to encourage employment and provide skills training to build people's confidence and ability to secure skilled jobs.

The operational and training plans for the proposed open cut mine are targeting a significant increase in the number of opportunities available for local indigenous people. The number of traineeships will

be increased from 10 to 20 per year. In addition, a target of 20 percent of the workforce has been set for indigenous representation.

MST trainees are enrolled in the Certificate II Entry to Mining Services which complies with Australian Standards endorsed by the Mining Industry Training Advisory Board (MITAB).

Some trainees have progressed to undertake specific skills-based apprenticeships such as boilermaking, carpentry, building, or mining. They have ultimately been employed at the mine in skilled positions such as Mill Plant Operator, Supply Officer, Up Dip Miner, Underground Plant Operator, Receptionist and Environmental Technician.



# Caring for our environment

We believe that superior environmental performance results in increased efficiency, lower risk and higher overall performance of our operations and is critical in maintaining our licence to operate.

## KEY CHALLENGES

The key environmental challenges for MRM operations are:

- Protecting the health of the riverine and marine environments around the mine and Bing Bong loading facility
- Continually improving the efficiency of the milling process
- Maintenance and long term management of the Tailings Storage Facility.

## ENVIRONMENTAL COMPLIANCE

MRM has in place an extensive environmental monitoring program which has been designed to detect any potential impact around the mine site as well as the McArthur River, Barney Creek, Surprise Creek and the Bing Bong loading facility. Testing ranges from daily, weekly or annual tests covering:

- Surface water monitoring
- Dust monitoring
- Soil and fluvial sampling
- Marine monitoring of sediment, seawater, seagrass and biota

- Groundwater monitoring
- Assessment of rehabilitation success on the Bing Bong dredge spoil area
- Kinetic leach column monitoring for acid mine drainage.

Nationally certified, independent laboratories in Darwin and Brisbane analyse samples from the monitoring program. Findings are compared against relevant federal health or environmental guidelines for soil, water, dust, marine sediment and groundwater. To date, the results show no adverse impact in the McArthur River or Gulf due to mining operations. A summary of the key outcomes is following.

## Surface water monitoring

MRM is surrounded by three waterways – McArthur River which is a slow flowing or dry creek bed for around 10 months of the year, and Barney and Surprise Creeks which are predominantly dry beds except in the wet season. Surface water monitoring is conducted across seven locations on site as well as upstream and downstream of the mine site. Additional upstream and downstream automatic sampling stations also monitor the McArthur River's water quality. These tests are conducted during periods of flow and no flow.

ENVIRONMENTAL PERFORMANCE

2005 Targets	Performance
<b>McArthur River Mining</b>	
Geopolymer injection project to guard against seepage from the tailings dam wall	✓ Completed
Develop options for design of TSF Cell 1 rehabilitation	✓ Completed
Review Environmental Management System	✓ Completed
Obtain approval to commence Test Pit Operations	✓ Approval granted in August 2005
Submit Environmental Impact Statement (EIS) for proposed open pit conversion to NT Government	✓ Draft EIS submitted August 2005, EIS Supplement December 2005
Commence seed collection project with local Aboriginal Association	✓ Completed

2006 Targets
Monitor ground and surface water for success
Implement HSEC Management System
Obtain approval to extend Test Pit Operations (granted in April 2006)
Successfully conclude environmental review process and obtain mine development approval
Expand a participatory monitoring program with the Borroloola community

✓ Achieved    ✗ Not achieved    → Action continues into 2006

Overall, the McArthur River and Surprise Creek recorded metal concentrations below ANZECC (Australian and New Zealand Environment Conservation Council) guidelines for water quality.

In regard to Barney Creek, no clear water quality trends were established. This creek only flows directly after high rainfall and the poor wet season falls in 2004/2005 prevented extensive sampling over time.

Soil and fluvial monitoring

Soil samples are taken each year at the dust monitoring sites around the mine. Fluvial (or sediment) samples are taken from the water monitoring sites. These fluvial samples are taken twice a year – at the beginning and end of the wet season – from the beds of the river or creek systems.

Overall, sediment in the McArthur River and Surprise Creek show metal levels well below ANZECC guidelines and no significant differences between the upstream and downstream testing sites. Barney Creek shows concentrations of metals slightly higher than guideline levels which may be due to a number of factors. The results of these tests are influenced by mine operations, weather conditions creating fugitive dust and the naturally occurring high levels of minerals in the environment. On this latter point, many natural outcrops of lead and zinc are found in the region. Over time these outcrops have eroded or leached into the surrounding soil and waterways by flood waters.

Marine monitoring of sediment, seawater, seagrass and biota

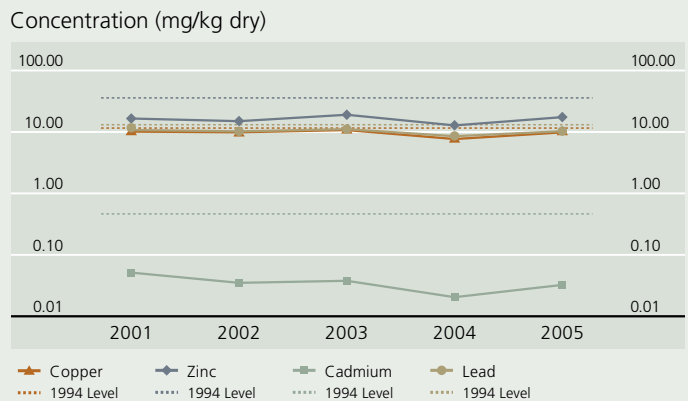
Charles Darwin University conducts an annual marine monitoring program in and around Bing Bong loading facility. This includes collection and analysis of sediments, seawater, seagrass and biota (oysters and mussels) for analysis. Their report for 2005 again demonstrated no adverse impact caused by the mine in the Gulf region. A summary of the results from the 2005 marine monitoring program is provided.

Sediment

Metal concentrations in sediment samples (with the exception of Bing Bong western beach) were within the ranges previously reported and consistent with benchmarks (see Graph 3).

Metal levels are slightly higher in sediments collected from the beach west of the Bing Bong loading facility compared to background beach sediments. This is attributed to the loading facility operations however the metal concentrations remain below guideline levels and are stable.

Graph 3. Comparison of heavy metals in sediments from offshore sites in the Bing Bong area 2001–2005 against 1994 baseline levels



**Note:** the 1992 and 1993 baseline sediments were a different grain size (<2mm) to what is currently used (<63 um). Cd <0.7 mg/kg is the detection limit that was achieved at the time. Analytical instruments have improved resulting in lower detection limits and therefore concentrations of 0.1 mg/kg now being reported. N/A – no data on Fe levels available in baseline levels in 1994.

# Caring for our environment



Aburri barge used to transport bulk concentrate to ships at sea.



View up the sea channel from the Aburri.

## Seawater

Metal levels in the seawater remain consistent with the background levels as shown in Graph 4. The metal levels are in fact significantly lower than the recommended maximum for total concentration of metals in marine waters as defined by the ANZECC Water Quality Guidelines 2000.

Lead isotope ratios in the seawater samples were the same as background seawater ratios and did not show any evidence of lead dispersed from the MRM ore concentrate.

## Oysters

Concentrations of zinc, lead and cadmium in oysters are consistent with the benchmarks as shown in Graph 5. Lead concentrations in oysters from all sites remain well below the maximum level for molluscs (2mg/Kg – Food Standards Australia New Zealand, 2004 (FANZ, 2004)). There has been a slight decrease in cadmium levels from all sample sites.

An increase in the level of copper was found at a testing site approximately 25 kilometres along the coast west of the Bing Bong loading facility. Copper levels at this site have always been high as shown by benchmark studies. It is an unusual phenomenon as copper levels in seawater and sediments at the same site are not elevated and have not risen.

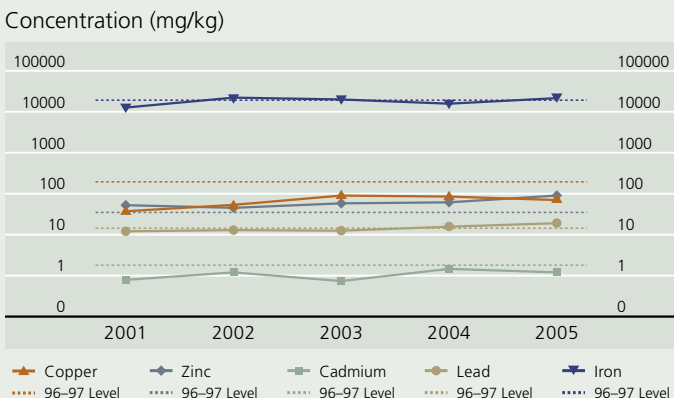
## Biota

As with sediments, the molluscs collected from the beach west of the load out facility recorded higher concentrations of heavy metals than those from the eastern beach. The levels recorded are still below the maximum levels for molluscs for cadmium and lead (FSANZ, 2004).

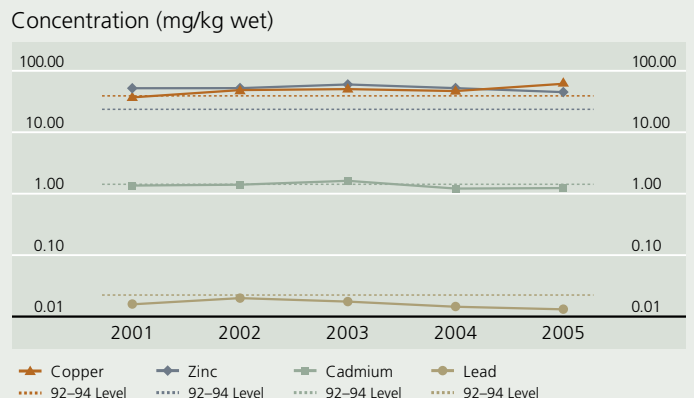
## Seagrass

Metal levels in seagrass samples are within previous ranges and are similar to levels in the same species in other parts of the south east Gulf region. Since cyclones damaged the Bing Bong seagrass beds in 2001, a different species of seagrass is now dominant. This means the current metal concentrations for seagrass cannot be compared against benchmark and historical data.

**Graph 4. Comparison of heavy metals in unfiltered seawater (TSS normalized) from the Bing Bong area 2001–2005 against control site levels for 1996–1997**



**Graph 5. Comparison of heavy metals in oysters from the Bing Bong area 2001–2005 against baseline metal concentrations for 1992–1994**





## case study

### OPEN PIT DEVELOPMENT EIS

Xstrata Zinc has announced its intention to convert the underground zinc-lead mine at McArthur River to an open pit operation to enable the mine to continue production. The conversion to an open pit mine will extend the mine's life by 25 years and was initially estimated to cost \$66 million.

The conversion will mean a surface pit covering 83 hectares will be constructed to access the ore, instead of accessing the orebody from MRM's extensive network of underground tunnels and rooms which are no longer economic. The conversion to an open pit mine will also involve diverting a 5.5 kilometre section of the seasonal McArthur River and approximately 2.5 kilometres of Barney and Surprise Creeks around the open pit.

The development of an open pit mine within the mining lease requires government approval.

A full Environmental Impact Statement (EIS) was lodged in August 2005 and following a public review period, an EIS Supplement was

lodged in December 2005. Both statements were prepared by MRM and URS Australia and were independently reviewed by Matrix+ Consulting Pty Ltd.

In February 2006, the NT Minister for Natural Resources and Environment recommended against the mine proposal due to environmental concerns. The Minister for Mines and Energy referred the matter back to the Environmental Protection Agency for further assessment on nine issues.

MRM is now engaged in a Public Environment Report process with the NT Government to further investigate these issues. This next stage in the environmental assessment of the development will be completed in 2006.

Meanwhile in April 2006, the NT Government approved a southern extension to MRM's existing test pit to enable the mine to remain operating while the environmental review is underway.



The MRM Processing Plant is a 24 hour operation.



Aerial view of the test pit.

## IMPROVING MILLING EFFICIENCY

MRM uses Xstrata Technology's IsaMill product which almost halves energy use. IsaMill is an ultrafine grinding technique which doubles the efficiency of conventional technology and generates up to 10 percent higher yield. Trials are also underway to assess different grinding media and expand the application of the technology to further improve energy efficiency.

In a further development, MRM has begun assessing the application of IsaMill technology in early stages of the milling process. At present, it is used in the stages requiring fine grinding. However, the studies now underway are investigating whether this technology may replace conventional milling techniques for coarser ground material. Following planning in 2005, pilot test work commenced in 2006.

Water recycling is also an area of particular focus for the milling operation. In an environment which receives 700mm of rainfall a year but has an evaporation rate of 3 metres per year, the recovery of water is a critical requirement. In 2005, MRM achieved a recovery rate of 87 percent of water through recycling.

## TAILINGS WALL UPGRADED

In 2005, MRM completed the second stage of a program to mitigate seepage from the tailings dam.

In the past few years, some minor sulphate leakage has occurred although ongoing monitoring has shown that no heavy metals entered Surprise Creek and there was no impact on flora and fauna in the

area surrounding the tailings dam. Extensive electromagnetic surveys were conducted to identify ground water movement and water flow direction to indicate the potential path of seepage.

MRM has worked to eliminate this seepage in a number of ways, including a trial involving injecting geopolymer fill along 750 metres of the most affected area. This successful trial led to a further \$2 million project completed in September 2005 to apply the treatment to 1.5 kilometres of the tailings dam wall.

This additional trial of the technology involved a series of holes being drilled in the bedrock at the base of the tailings dam wall. These holes were approximately five metres apart and drilled to depths of around 13 metres.

The geopolymer material injected into these holes followed the water flow path, filling voids and seepage areas and eventually solidifying to provide a physical barrier to prevent any further seepage from the tailings dam.

Ongoing surface water monitoring at Surprise Creek and ground water monitoring around the Tailings Storage Facility during 2006 will determine the success of the project.

Under plans for the open pit development, the tailings dam would be extended away from Surprise Creek and new deposits will be placed in cells furthest away from Surprise Creek. Cells nearest Surprise Creek will be rehabilitated to prevent any further seepage.



## Caring for our community

Xstrata Zinc believes that the wellbeing of our employees, their families and the communities in which we operate is crucial to maintaining our social licence to operate our business.

### KEY CHALLENGES

The key community challenges for MRM operations are:

- Effectively engaging with local communities, which consist of the Yanyuwa, Gurdanji, Marra and Garrawa language groups, to assist them in their understanding of MRM operations, to understand the needs of these communities and to develop open, transparent, two way dialogue
- Improving indigenous participation in MRM's operations through jobs, training and business opportunities
- Community capacity building to improve social services and facilities to address high unemployment and social disadvantage in the town of Borroloola
- Ensuring no Aboriginal sacred sites are affected by the mine.

### COMMUNITY ENGAGEMENT AND CONSULTATION

During 2005 MRM implemented a range of community engagement activities to cater for the diverse levels of education and interests in the community concerning the proposed open pit conversion.

#### Information

- Seven Fact Sheets and a "Your questions answered" poster were produced regarding the development proposal
- A dedicated website was launched ([www.mcarthurriver.com.au](http://www.mcarthurriver.com.au))
- A free-call information hotline was established for anyone with questions regarding MRM and attracted 30 phone calls and 4 emails by the end of the calendar year. Of these, half were enquiries regarding employment and contract opportunities at MRM.

## SOCIAL RESPONSIBILITY PERFORMANCE

2005 Targets	Performance	2006 Targets
<b>McArthur River Mining</b>		
Support local events, cultural and community development initiatives	✓ Support given for local show, rodeo, sport competitions, community calendar events and arts presentations	Finalise the MRM Corporate Social Involvement program
Improve the job readiness of young people in the community via Vocational Education Training programs and Pre Employment initiatives	→	Continue to form links with local job networking and education facilities to identify potential job applicants
Develop existing relationships with local leaders and business people, both professionally and socially	✓ Community consultation, mine visits by community, education and Traditional Owner groups	Develop the Community Relations Policy and Actions which embrace the spirit of corporate and community with sustainable outcomes and key performance indicators
		Additional resources and personnel to improve the MRM Community Relations Initiative
		Establish the MRM Community Reference Group

✓ Achieved    ✗ Not achieved    → Action continues into 2006

### Consultation

- Personal meetings were held with a range of representative bodies within the Borroloola and Darwin communities as a way of seeking feedback on issues and concerns related to the development proposal
- Three open community meetings and targeted group meetings with Borroloola Community Council and Traditional Owners were held between August and December 2005
- All issues and feedback generated through these consultation meetings were addressed by the EIS Supplement.

### Active Participation

- Several MRM site tours and helicopter inspections were hosted for community members
- Gurdanji Traditional Owners were invited to assist in the inspection of the development site to check on the status of sacred sites
- Advice on community engagement and the open pit proposal was sought from Mabunji Aboriginal Resource Association Inc, Marwurlu and Wirriwankuma Aboriginal Corp (MAWA) and Northern Territory Government Ministers and local representatives.

During 2005 a separate consultation program was also conducted regarding the establishment of a Corporate Social Involvement program targeting health, education, employment, culture sport and social issues in the communities in which we operate. This program will be launched in 2006 subject to the approval of the conversion to open pit operations.



Typical view of the McArthur River along the mine reach during the dry season.



The Waralungku Arts Centre in Borrooloola supported by MRM (above and right).



## COMMUNITY PARTNERSHIPS AND SUPPORT

MRM maintains a Community Relations office in Borrooloola. During 2005 our key activities included:

- Assisting the Borrooloola Community Education Centre to develop Vocational Education Training programs aimed at improving school attendance by non attending students seeking employment opportunities
- Continued support of Mabunji Aboriginal Resource Association Inc to develop their employment and training initiatives, including pre employment training of CDEP (Community Development Employment Projects) workers in preparation for MRM employment
- Forming a strategic partnership between MRM, ITEC Employment Agency, Mabunji Resource Association CDEP and the Working Together for Indigenous Youth Program to address the employment and training opportunities for Borrooloola youth and residents
- Supporting visiting health practitioners and specialists such as children's health screening at the Borrooloola Community Education Centre
- Providing professional development and tertiary assistance for local people pursuing professional qualifications in health and related fields
- Support for the ongoing development of the Gulf Health Service Inc Regional Health Initiative in the Borrooloola and Gulf Region
- Assisting the Borrooloola and Robinson River Schools in the development of curriculum and education resources and providing support for teachers' professional development
- Participation on various community committees and boards including Borrooloola Community Education Management Committee, Borrooloola Regional Youth Development Committee, Board of Directors of Gulf Health Inc., Borrooloola Heritage Committee, Borrooloola Regional Development Committee.

## Sponsorships and donations

In 2005 MRM contributed around \$50,000 in sponsorships and donations towards:

- MRM Science Award Program
- Annual Borrooloola Show and Rodeo Festival
- Annual King Ash Bay Fishing competition
- Sporting initiatives in the Borrooloola community including women's softball, men's football, assistance to promising sport persons, and support for community representative teams
- Waralungku Art Centre and development of annual Art and Culture programs
- Donation of bicycles to the Borrooloola Northern Territory Health Centre to facilitate health screening of students at the Borrooloola school
- Professional development assistance for Northern Territory Health Personnel, Northern Territory Education Personnel and Mabunji personnel.

MRM also made a one-off financial pledge of \$600,000 for capital works to Borrooloola Swimming Pool as part of a joint initiative funded by the Australian and Northern Territory Governments.

# Caring for our community

## Indigenous Pathways to Employment

MRM has developed a formal Employment and Training Strategy titled 'Indigenous/local people in the Mining Industry'.

The mine's aim is to provide links between school programs that encourage children to get a good education and vocational training that provides long-term skills. For this reason, MRM has entered partnerships with:

- Department of Employment and Workplace Relations for a Structured Employment and Training Program which supports the employment and training of unskilled indigenous people
- Northern Territory Employment and Training Authority for the provision of a Vocational Education Training accredited program
- Northern Territory Department of Education Memorandum of Understanding which aims to improve the scope of education and post education outcomes for students at Borroloola
- Borroloola Community Education Centre Partnership
- Northern Territory Chamber of Commerce and Industry under a Memorandum of Agreement regarding the delivery of Registered Training Organisation services.

The purpose of these partnerships is to develop the job readiness of local employment seekers through the provision of pre-vocation and vocational education initiatives, as well as programs in the areas of adult education, job placement and 'Indigenous Pathways to Employment'.

MRM has employed local people through placements in advertised vacant positions, traineeships and apprenticeships.



Trainees in the Maintenance Service Team, the entry level program for unskilled employees.

# Glossary

## **ANZECC**

The Australian and New Zealand Environment Conservation Council which establishes guidelines for fresh and marine water quality

## **DISR – Disabling Injury Severity Rate**

Disabling injury frequency rate = DI x 1,000,000/hours worked

## **HSEC**

Health, safety, environment and community

## **ISO**

International Standardisation Organisation

## **LTI – Lost Time Injury**

An occupational injury or disease that results in days away from work on any rostered shift subsequent to that on which the injury occurred. A fatality is also recorded as an LTI

## **LTIFR – Lost Time Injury Frequency Rate**

Lost time injury frequency Rate = LTI x 1,000,000/hours worked

## **µg/dl**

Micrograms per decilitre

## **PPE**

Personal Protective Equipment

## **Tailings and Tailage Storage Facility**

The fine fraction of waste rock remaining after the mining and on-site processing of mineral resources. This consists of finely ground particles and traces of process reagents and chemical residues. Tailings are piped into engineered impoundments known as tailings dams, which are developed, operated, monitored and maintained to prevent seepage and water contamination both during and after mining operations

## **TRI – Total Recordable Injuries**

A measure that includes:

- Lost time injuries (including fatalities)
- Restricted work injuries (RWI)
- Medical treatment injuries (MTI)

## **TRIFR – Total Recordable Injury Frequency Rate**

Total recordable injury frequency rate = (LTI + RWI + MTI) x 1,000,000/hours worked

TRIFR measures all injuries except first aid cases and includes the impact of significant injuries on employees who may be able to perform alternative duties, but not their normal function, and who would not be captured by indicators based on lost time injuries alone



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